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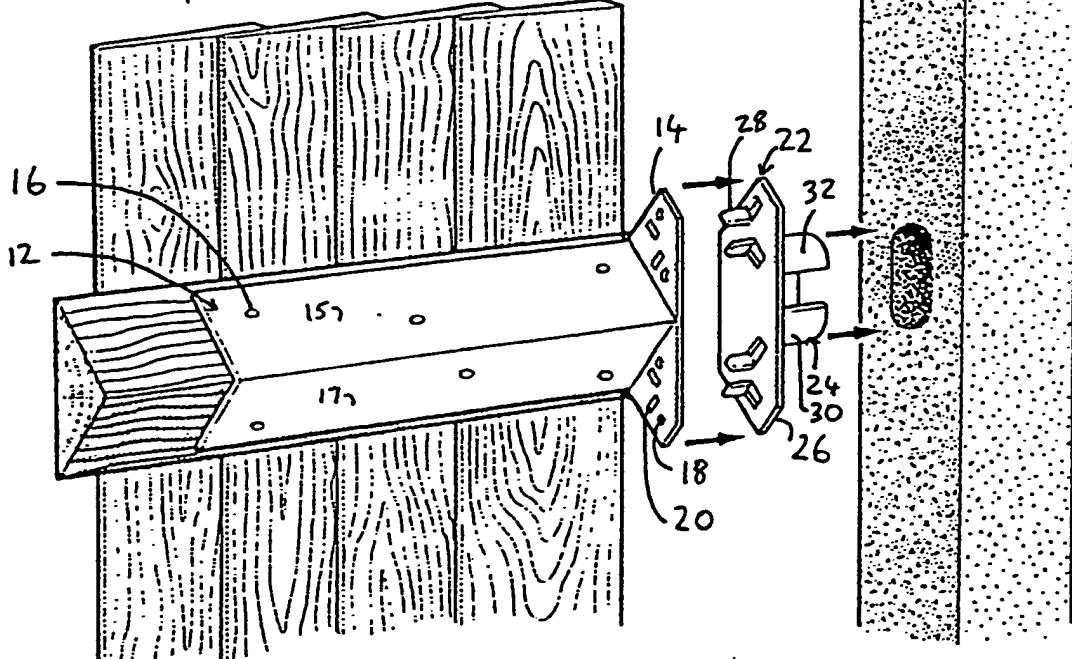
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## (54) Fence rail repair bracket

(57) A bracket 12 for fixing an arris to a supporting post includes a body with plurality of holes 16 therein to accommodate nails or screws to fix the bracket to the arris and a double flange having a plurality of through-holes 18 and slots 20. The holes are for receiving nails or screws to fix the bracket to a timber supporting post. The slots are adapted to receive tabs 28 on a flange of an adaptor 22 for securing the adaptor to the bracket. In one form, a plug portion 32 of the adaptor engages with a socket in a concrete supporting post. In alternative forms, the adaptor is bolted to a concrete post, or omitted in the case of a wooden post, the bracket then being secured directly to the post.

FIG 1



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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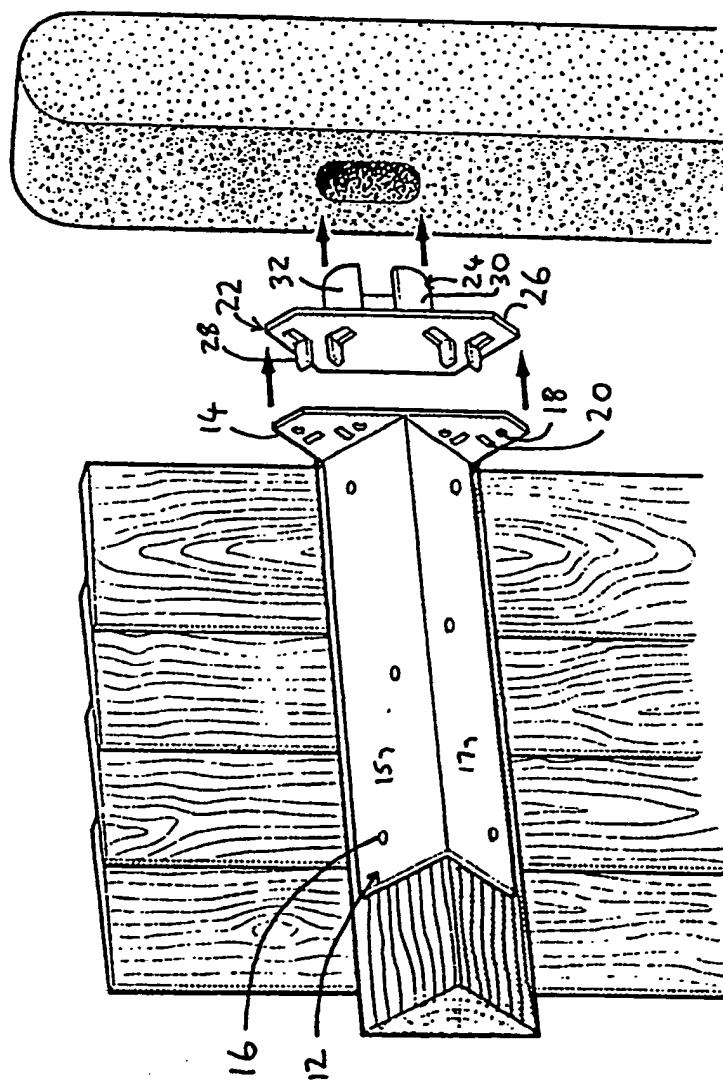


FIG 1

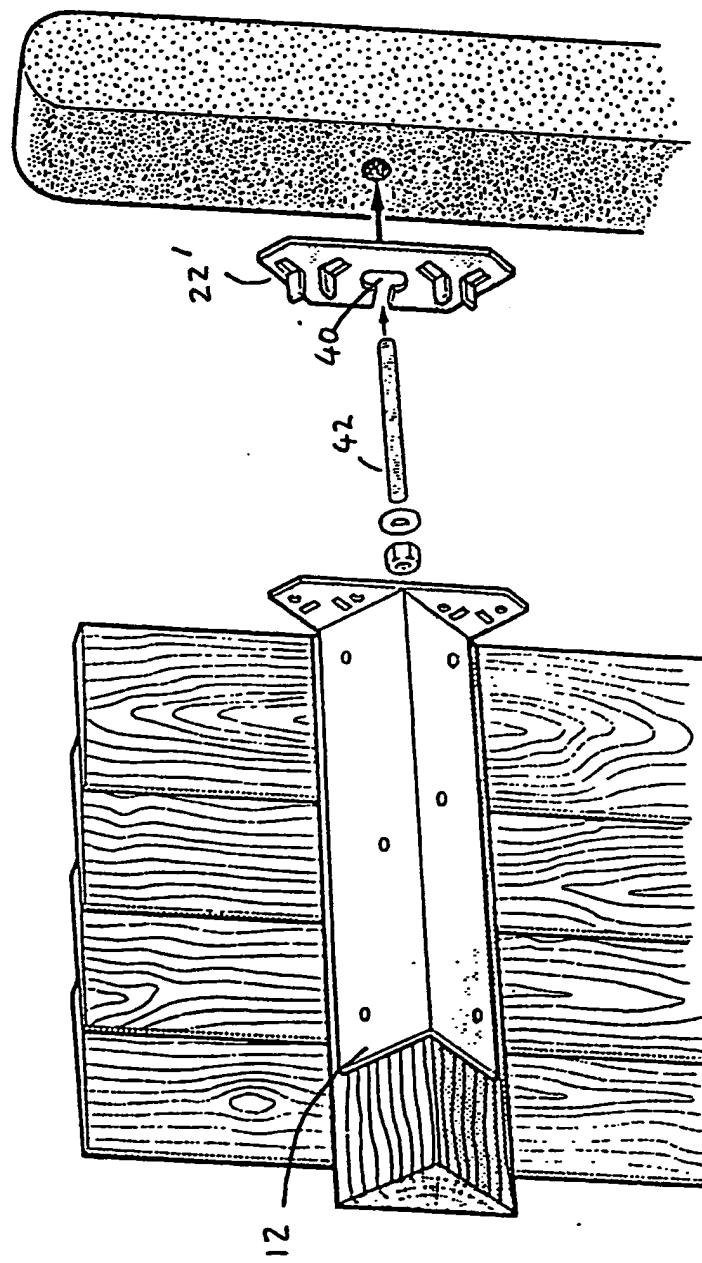


Fig 2

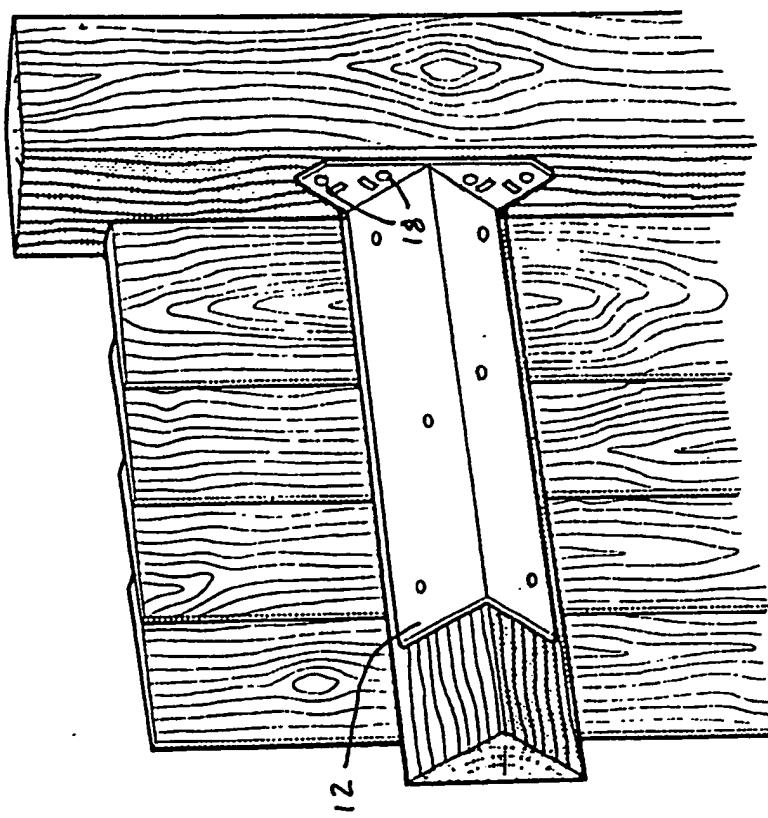


FIG 3.

FENCE RAIL REPAIR BRACKET AND FIXTURE

The present invention relates to a fence rail repair bracket and fixture.

5 A conventional close boarded fence comprises feather edge boarding secured together by means of one or more arris rails extending between supporting posts; the posts are ordinarily timber or concrete.

10 When an arris rail needs to be installed, for example to replace a rotted one, if the supporting posts are timber, the new rail is attached to the supporting posts by means of a so-called arris bracket; this avoids the need to move one or both of the fence posts to insert the ends of the new rail in the pre-formed sockets provided in the post.

15 Typically, the bracket comprises a channel for receiving the end of the arris rail and a pair of flanges which are nailed or bolted to the fence post. This means of repair is, however, not suited to fences having concrete posts because it is difficult to nail or screw things to such a post, nor

20 to fences with concrete posts having "eyehole" fixtures.

The present invention seeks to provide a means for installing an arris rail in a fence having concrete posts and to provide a bracket which can be used with concrete or wooden fence posts.

25 The present invention provides a fixture for securing an arris for a close boarded fence to a supporting post having preformed sockets for receiving ends of boards of the fence, the fixture having an adaptor portion fittable to the post and a bracket fixable to the arris.

30 The adaptor portion can have a plug portion shaped and sized to fit into one of the preformed slots in the supporting post, these slots being of generally standard size and shape. Conveniently, the fixture is in two separate parts, one part constituting the adaptor portion

35 and the other being an arris rail bracket which is fixed to

the arris rail and is adapted to be secured to the adaptor when the rail and bracket are installed. With the fixture in two parts, the appropriate type of adaptor can be used with the bracket according to whether the fence post is 5 provided with a socket or eyehole. Suitably, the two parts are provided with flanges which come into face-to-face relation when the rail is installed; the flange on the adaptor may be provided with one or more tabs which become inserted through corresponding slots in the flange of the 10 bracket - the tab(s) can then be knocked over to secure the two parts together.

Alternatively, the adaptor can be adapted for use with fence posts having eyeholes, for example, by having a through-hole for a separate bolt or by having a bolt secured 15 to it.

The invention further provides a fixture for securing an arris to a close boarded fence post including: a bracket having a plurality of holes for the passage of nails or screws therethrough for securing the bracket to the arris 20 and at least one flange portion having a plurality of slots; and an adaptor having a portion for enabling it to be secured to a fence post and at least one flange portion having a plurality of tabs for engagement with corresponding slots in the, or the respective, flange portion of the 25 bracket.

The invention further provides a bracket for securing an arris to a close-boarded fence, the bracket comprising a body portion defining a V-shaped channel to receive the arris and at least one flange portion at one end 30 of the body portion and turned laterally outwardly relative to the channel, the at least one flange portion having at least one through-hole for the passage of a screw or nail to attach the bracket to a wooden post and at least one slot for receiving a tab projecting from an adaptor for securing 35 the bracket to a concrete fence post.

As will become apparent from the following description, both the bracket and the adaptor may be easily manufactured by stamping and folding a sheet metal blank.

The following description is given by way of non-  
5 limitative example with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a bracket of a fixture according to the present invention when used with a socketed fence post;

10 Figure 2 is a perspective view of the bracket of figure 1 when used with an eyeholed fence post; and

Figure 3 is a perspective view of the bracket of figure 1 when used with a wooden fence post.

The repair bracket shown in figures 1 to 3 is  
15 stamped and folded from sheet metal and includes a main bracket body 12 having two substantially rectangular sides 15, 17 substantially perpendicular to one another which form a channel for receiving the end of the arris rail. Each side has a number of fixing holes 16 for the passage of screws or  
20 nails therethrough to secure the bracket to the arris rail.

At one end of the bracket body 12 there is a double flange 14, as best shown in figures 2 and 3, having fixing holes 18 for the passage of nails, screws or bolts therethrough.

These fixing holes are to enable the bracket to be nailed,  
25 screwed or bolted to the fence post if the fence post is timber. The end flanges 14 also include elongate slots 20 for use in securing the adaptor 22, described below to the bracket body 12 when the bracket is used in combination with the adaptor 22 to secure the arris nail to a concrete fence  
30 post.

The adaptor 22 is also formed by stamping and folding sheet of metal and includes a plug portion 24 and a flange 26. The flange 26 is similarly shaped to the double flange 14 of the bracket body 12. Cutouts in the flange 26  
35 provide tabs 28 which extend rearwardly of the plug 24,

perpendicularly to the plane of the flange 26.

The tabs 28 are so disposed on the flange 26 so as to engage with the slots 20 in the double flange 14 of the bracket 10; after engagement, the tabs can be simply knocked 5 down using a hammer to secure the bracket to the adaptor. Any other convenient type of securing means may be provided to secure the adaptor 22 to the repair bracket 10. For example, threaded pins may be provided on the adaptor 22 for engagement with appropriate bolts passing through suitable 10 holes in the double flange 14, although such an arrangement may in general be less convenient than the simple tab and slot arrangement shown in the drawings.

The plug 24 is so shaped so as to fit into a standard size socket in a concrete supporting post and is 15 formed by a single sheet of metal which is bent around at its two ends to form two lips 30, 32 and to have a generally substantially oblong cross-section. The lips 30, 32 preferably flare outwardly at their ends to ensure a tight fit in the post slot.

20 In use of the fixture, the triangular arris rail, used to carry the feather edged boarding of a close boarded fence which is to be replaced is removed from the fencing. Adaptors 22 are plugged into the socket in the two concrete posts to between which the new rail is to be installed.

25 A bracket 10 is fixed to each end of the new rail by nails or screws, preferably loosely so that the correct fit can be obtained when the nail is installed. The new nail is then offered up into position and the tabs 28 of the two adaptors engaged with the slots 20 of the brackets.

30 Once the nail is correctly positioned, the tabs 28 are knocked down to secure the adaptors and brackets together.

35 The size and shape of the plug 24 can be altered to a certain extent by reshaping the lips 30, 32. For example, they can be pushed inwardly, eg, by hammering, to

reduce the length of the plug, or flared outwardly more to provide a snug fit in a larger socket in the post. Although the sockets of the supporting post are of generally standard size, this feature of the plug enables the adaptor for to 5 accommodate variations in socket size.

Figure 2 shows the fixture with an alternative form 22' of the adaptor for use with a fence post with an eyehole. For this purpose, the adaptor 22' omits the plug portion 24 and instead has an open-sided through-hole 40 10 through which a bolt 42 is inserted to secure the adaptor 22' to the post. Obviously two such adaptors 22' could be bolted back-to-back on opposite sides of the post. Alternatively, the adaptor 22' could be provided with a shorter bolt or stud fixed to it and which is simply 15 inserted in the outer end of the eyehole.

As the double flange 14 of the bracket 10 includes the conventional fixing holes 18 the same bracket can be used for securing a replacement arris rail to a conventional timber post, as shown in figure 3.

CLAIMS

1. A fixture for securing an arris for a close boarded fence to a supporting post the fixture having an adaptor portion fittable to a fence post and a bracket fixable to the arris.
2. A fixture according to claim 1 and which is in two parts, the first part being the adaptor part and the second part being the bracket, the two parts being securable together.
3. A fixture according to claim 2 wherein the two parts are engageable with one another by relative movement lengthwise of the bracket.
4. A fixture according to claim 2 or 3 wherein said adaptor part and the bracket comprise at least one flange portion, the respective flange portion(s) of the two parts being brought into face-to-face relation when the two parts are to be secured together, and wherein the respective flange portion(s) have complementary securing means for securing the two parts together.
5. A fixture according to claim 4, wherein the securing means includes a number of tabs on the flange portion(s) of the adaptor part and a corresponding number of slots in the flange portion(s) of the bracket for receiving the tabs, the tabs being deformable to secure the adaptor to the bracket.
6. A fixture according to any one of claims 2 to 5 wherein the two parts are each stamped from sheet metal.
7. A fixture according to any one of claims 2 to 6

wherein the bracket has body portion defining a V-shaped channel to receive the longitudinal end of arris of the arris and a pair of flanges at one end of the body portion which are directed laterally outwardly relative to the 5 channel to lie in face-to-face relation to corresponding flanges portion of the adaptor point.

8. A fixture according to any one of the preceding claims, for use with a fence post having a pre-formed 10 socket, the adaptor having a plug portion engageable in the socket.

9. A fixture according to claim 8 wherein said plug portion includes at least two flared lips to provide a tight 15 fit into said socket.

10. A fixture according to claim 8 or 9 wherein the socket portion has a generally substantially oblong cross-section.

20 11. A fixture according to any one of claims 1 to 7 wherein the adaptor is adapted to be fittable to a fence post having an eyehole.

25 12. A fixture according to claim 11 wherein the adaptor is adapted to be fitted to the fence post by means of a bolt or pin to be engaged in the eyehole.

30 13. A fixture according to claim 12 wherein the adaptor is provided with a through-hole for the passage of a bolt for bolting the adaptor to the post through the eyehole.

35 14. An apparatus according to any one of the preceding claims, wherein the bracket has a number of through-holes

for the passage of screws or nails for fixing the bracket to the arris and/or supporting post.

15. A fixture for securing an arris to a close boarded fence post including: a bracket having a plurality of holes for the passage of nails or screws therethrough for securing the bracket to the arris and at least one flange portion having a plurality of slots; and an adaptor fittable to the supporting post and at least one flange portion having a plurality of tabs for engagement with corresponding slots in the, or the respective, flange portion of the bracket.

16. A bracket for securing an arris to a close-boarded fence, the bracket comprising a body portion defining a V-shaped channel to receive the arris of the arris and at least one flange portion at one end of the body portion and turned laterally outwardly relative to the channel, the at least one flange portion having at least one through-hole for the passage of a screw or nail to attach the bracket to a wooden post and at least one slot for receiving a tab projecting from an adaptor for securing the bracket to a concrete fence post.

17. A bracket according to claim 16 in combination with the adaptor for securing the bracket to a concrete fence post.

18. An arris bracket substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

19. An arris fixture substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

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